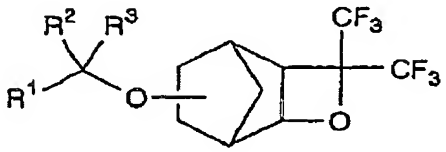
ABSTRACT

A fluorine-containing cyclic compound is represented by the formula:



(1)

wherein R^1 represents a halogen atom; R^2, R^3 each represents hydrogen or a straight-chain, branched or cyclic hydrocarbon group having 1-25 carbon atoms, or an aromatic hydrocarbon group, and may contain a halogen, oxygen, nitrogen, or sulfur atom. A fluorine-containing polymerizable monomer derived from the above compound, a fluorine-containing compound obtained by polymerization or copolymerization using the above compound or monomer, a resist material and a pattern-forming process using the above compound are also disclosed. The compound is suitable for a resist material having high transparency in a wide wavelength region from an ultraviolet to a near-infrared light region, high adhesion to a substrate, film-forming properties, high etching resistance, and a high glass transition point, particularly for a photoresist material in a vacuum ultraviolet wavelength region. The pattern-forming process using the polymer compound is suitable for forming a high-resolution pattern.